



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

REGION 4  
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ATLANTA, GEORGIA 30303-8960  
April 20, 2012

Chief, Rulemaking and Directives Branch  
Division of Administrative Services  
U.S. Nuclear Regulatory Commission  
Mail Stop TWB-05-B01M  
Washington, D.C. 20555-0001

RE: EPA Review and Comments  
Final Environmental Impact Statement (FEIS) for the  
GE-Hitachi Global Laser Enrichment LLC Facility to  
Construct, Operate, and Decommission a  
Laser-Based Uranium Enrichment Facility  
CEQ No. 20120058

Dear Sir:

The U.S. Environmental Protection Agency (EPA) reviewed the subject Final Environmental Impact Statement (FEIS) pursuant to Section 102(2)(C) of the National Environmental Policy Act (NEPA), and Section 309 of the Clean Air Act. We appreciate your responses to our comments regarding the Draft Environmental Impact Statement (DEIS), which are included in Appendix J of this FEIS.

The proposed action is for GE-Hitachi Global Laser Enrichment LLC (GLE) to construct, operate, and decommission a laser-based uranium enrichment facility at a site near Wilmington, North Carolina, on existing GE property. The proposed technology is separation of isotopes by laser excitation (SILEX). The enriched uranium produced by the facility would be used to manufacture fuel to supply nuclear power reactors. An NRC license would be required to authorize GLE for 40 years. The FEIS discusses the proposed action and alternatives, including 22 alternative sites and the no-action alternative.

The waste handling operation considered in the FEIS involves the storage of the depleted  $UF_6$  at on-site storage pads, followed by the conversion of the depleted  $UF_6$  to its oxide form triuranium octaoxide ( $U_3O_8$ ), due to the chemical stability of the latter. This would involve transporting depleted  $UF_6$  (tails) to either a DOE-owned or licensed commercial conversion facility, and transporting the resulting  $U_3O_8$  to a DOE site or a licensed commercial low-level waste disposal facility.

Based on EPA's review of the FEIS, there are environmental concerns that should be addressed as the project progresses. In particular, waste minimization and appropriate on-site storage of spent  $UF_6$  and storage and transportation of  $U_3O_8$  is necessary to prevent environmental impacts. The FEIS notes that on-site storage of depleted  $UF_6$  could continue for a period beyond

10 years, although current plans anticipate a length of storage that depends on the capacity of the on-site storage pads.

The FEIS states that GLE intends to develop a waste minimization plan that includes all facility processes. EPA recommends that these plans are committed to in the decision documents. Groundwater monitoring plans for the proposed facility are not yet available, and the decision documents should include commitments to groundwater monitoring. GLE proposes to use treated sanitary wastewater as the source of cooling tower makeup water. Environmental Justice, along with potential impacts to wetlands, are also particular areas of concern, and impacts should be avoided to the extent feasible. Unavoidable impacts should be mitigated. GLE's proposed measures to mitigate transportation and traffic impacts in the vicinity of the local community should also be committed to in the decision documents.

Thank you for the opportunity to comment on this FEIS. Please send us a copy of the Record of Decision (ROD) when it becomes available. If you have any questions or need additional information, please contact Ramona McConney of my staff at (404) 562-9615.

Sincerely,

A handwritten signature in black ink, appearing to read "Mueller", with a stylized flourish at the end.

Heinz J. Mueller, Chief  
NEPA Program Office  
Office of Policy and Management